preparation of a data flow network comprises two different phases: (1) creating a point hierarchy for each object to be displayed in the virtual world and (2) interconnecting input units, function units and output units to control the flow/transformation of data. Each function unit outputs a position value (x, y or z) or orientation value (yaw, pitch or roll) for one of the points defined in the point hierarchy. As shown in Fig. 2, the top and bottom input units are connected to first and second function units to produce first and second position/orientation values represented by first and second output units ("x-Head" and "R-minutehan"). The middle two inputs of Fig. 2 are connected to third and fourth function units, the outputs of which are combined with the output from a fifth function unit, a constant value function unit, to create a third position/orientation value represented by a third output unit (R-hourhand), which is the output of a sixth function unit.

As shown in Fig. 7, one of the gears of Fig. 3 is described as a hierarchy of points. Choosing point 300a as a beginning point, child points, 300b, 300c and 300d, are connected to their parent point, 300a, by specifying the position and orientation of each child point with respect to the parent point. By describing the relationship of some points to other points through the point hierarchy, the number of relationships to be described by the input units, function

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